AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1 – 39. (Cancelled)

40. (New) In multicarrier modulation communications utilizing a plurality of QAM-modulated carrier signals, each carrier signal having a phase characteristic based on a QAM modulation, a method of randomizing the phase characteristics of the carriers comprising:

generating an array of pseudo-random numbers;

determining a phase shift for each carrier signal by multiplying a value from the array of pseudo-random numbers times (π/m) mod 2π, where m is an integer; and

adding the determined phase shift for each carrier signal to the phase characteristic of each carrier signal.

41. (New) The method of claim 40, wherein the method is performed in a multicarrier transmitter.

42. (New) The method of claim 40, wherein the method is performed in a multicarrier receiver.

43. (New) In multicarrier modulation communications utilizing a plurality of QAM-modulated carrier signals, each carrier signal having a phase characteristic

based on a QAM modulation, a system for randomizing the phase characteristics of the carriers comprising:

means for generating an array of pseudo-random numbers;

means for determining a phase shift for each carrier signal by multiplying a value from the array of pseudo-random numbers times (π/m) mod 2π, where m is an integer; and

means for adding the determined phase shift for each carrier signal to the phase

characteristic of each carrier signal.

44. (New) The system of claim 43, wherein the system is associated with a multicarrier transmitter.

45. (New) The method of claim 43, wherein the system is associated with a multicarrier receiver.

46. (New) In multicarrier modulation device utilizing a plurality of QAM-modulated carrier signals, each carrier signal having a phase characteristic based on a QAM modulation, the device configured to randomize the phase characteristics of the carriers comprising:

an array of pseudo-random numbers;

a modulator adapted to determine a phase shift for each carrier signal by multiplying a value from the array of pseudo-random numbers times (π/m) mod 2π, where m is an integer and to add the determined phase shift for each carrier signal to the phase characteristic of each carrier signal.

47. (New) The device of claim 46, wherein the device is a transmitter.

48. (New) The device of claim 46, wherein the device is a receiver.

49. (New) In multicarrier modulation communications utilizing a plurality of QAM-modulated carrier signals, each carrier signal having a phase characteristic based on a QAM modulation, an information storage media having information stored thereon that randomizes the phase characteristics of the carriers comprising:

information that generates an array of pseudo-random numbers;

information that determines a phase shift for each carrier signal by multiplying a value from the array of pseudo-random numbers times $(\pi/m) \bmod 2\pi$, where m is an integer; and

information that adds the determined phase shift for each carrier signal to the phase characteristic of each carrier signal.

50. (New) The media of claim 49, wherein the information operates in a multicarrier transmitter.

51. (New) The media of claim 49, wherein the information operates in a multicarrier receiver.